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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067.978	02/08/2002	Vincent J. Gatto	EP-7532	3784

7590 07/29/2004

Mr. Dennis H. Rainear
Patent & Trademark Division
Ethyl Corporation
330 South Fourth Street
Richmond, VA 23219

EXAMINER

JOHNSON, JERRY D

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 07/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/067,978	GATTO, VINCENT J.	
	Examiner	Art Unit	
	Jerry D. Johnson	1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,6-28,37-40,42 and 47-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,6-28,37-40,42 and 47-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1764

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 14, 2004 has been entered.

Applicant is advised that should claim 59 be found allowable, claim 60 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3, 6-28, 37-40, 42, 47-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gatto et al. in view of Latyuk et al. and Belov et al.

Gatto et al., U.S. Patent 6,174,842, teach lubricating oil compositions comprising a major amount of an oil of lubricating viscosity comprising at least one oil-soluble molybdenum compound substantially free of reactive sulfur which provides about 50 to 1000 ppm of molybdenum to the lubricating composition, about 1000 to 20,000 ppm of at least one oil-soluble diarylamine and about 2,000 to 40,000 ppm of at least one alkaline-earth metal phenate detergent (column 3, lines 6-14). Oil-soluble molybdenum compounds are disclosed in column 4, line 48 to column 5, line 56. The composition of the lubricant oil can vary significantly based on the customer and specific application. The oil may contain, in addition to the three-component

Art Unit: 1764

system according to the invention, a detergent/inhibitor additive package and a viscosity index improver (column 8, lines 53-57). The detergent/inhibitor additive package may include dispersants, detergent, zinc dihydrocarbyl dithiophosphates (ZDDP), additional antioxidants, pour point depressants, corrosion inhibitors, rust inhibitors, foam inhibitors and supplemental friction modifiers (column 8, lines 63-67). Generally, the ZDDP is present in the finished oil between about 0.25 and 1.5 wt.%. The base oil may be selected from any of the synthetic or natural oils or mixtures thereof (column 9, lines 45-47). While Gatto et al. teach the addition of other functional additives, Gatto et al. differ from the instant claims in not teaching the claimed hydroxy-substituted dithiocarbamates.

Latyuk et al. and Belov et al. are relied on as teaching hydroxy-substituted dithiocarbamates as claimed having good antiwear, antiscuff and anticorrosion properties as additives for lubricating oil compositions.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to add a hydroxy-substituted dithiocarbamate as taught by Latyuk et al. and Belov et al. to a lubricating composition as taught by Gatto et al. in order to improve the antiwear, antiscuff and anticorrosion properties of said lubricating composition.

Claims 1, 3, 6-28, 37-40, 42, 47-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luciani et al. in view of Latyuk et al., Belov et al. and the admitted prior art.

Luciani et al., U.S Patent 5,698,498, teach lubricating compositions comprising a major amount of an oil of lubricating viscosity and a hydroxyalkyl dithiocarbamate or a borate thereof and at least one sulfur compound or at least one phosphorus or boron antiwear or extreme pressure agent (column 1, lines 59-64). The hydroxyalkyl dithiocarbamates and borates thereof

Art Unit: 1764

are useful in lubricants where they can function primarily as antiwear, antiweld, antiscuff, extreme pressure, anticorrosion, antioxidant and/or friction modifying agents (column 13, lines 19-23). The hydroxyalkyl dithiocarbamates may be prepared by reacting an amine with carbon disulfide to form a dithiocarbamic acid or salt. This dithiocarbamic acid or salt is then further reacted with an epoxide. In another embodiment, the amine, carbon disulfide and the epoxide are reacted simultaneously. The epoxide is generally an aliphatic epoxide having at least 2 to about 30 carbon atoms, preferably, from 2 to about 20 carbon atoms. Examples of useful epoxides include, *inter alia*, oleic acid oxide and methyl oleate oxide (column 6, lines 35-47). The hydroxyalkyl dithiocarbamates and borates thereof may be present in a final product, blend, or concentrate in any amount effective in lubricating compositions. Generally they are present in the lubricating composition in an amount from about 0.01%, or from about 0.1%, or from about 0.5%, or from about 1% up to about 10%, or up to about 5% by weight (column 13, lines 52-58). Examples of phosphorus or boron containing antiwear/extreme pressure agents include, *inter alia*, zinc dithiophosphates (column 20, line 63 to column 21, lines 23). The composition may contain other additives. Such additives include, for example detergents and dispersants, corrosion- and oxidation-inhibiting agents, pour point depressing agents, extreme pressure agents, antiwear agents, color stabilizers and anti-foam agents (column 25, lines 35-40). While Luciani et al. teach lubricating compositions comprising hydroxyalkyldithiocarbamates and further additives, Luciani et al. differ from the instant claims in not teaching alkylthiohydroxydithiocarbamates and compositions comprising molybdenum compounds.

Art Unit: 1764

Latyuk et al. and Belov et al. are relied on as teaching hydroxy-substituted dithiocarbamates having good antiwear, antiscuff and anticorrosion properties as additives for lubricating oil compositions.

On page 2, lines 9-32 of the specification, applicant discloses

[t]here are many examples in the patent literature showing the use of molybdenum additives as antioxidants, deposit control additives, anti-wear additives and friction modifiers, including:

US 5,840,672	US 5,814,587	US 4,529,526	WO 95/07966
US 5,650,381	US 4,812,246	US 5,458,807	WO 95/07964
US 5,880,073	US 5,658,862	US 5,696,065	WO 95/07963
US 5,665,684	US 4,360,438	US 5,736,491	WO 95/27022
US 5,786,307	US 4,501,678	US 5,688,748	EP 0 447 916 A1
US 5,807,813	US 4,692,256	US 5,605,880	WO 95/07962
US 5,837,657	US 4,832,867	US 4,705,641	EP 0 768 366 A1
US 5,925,600	US 5,922,654	US 5,916,851	US 5,895,779
US 5,888,945	US 5,939,364	US 6,074,993	US 6,063,741
US 6,017,858	US 5,994,277	US 5,824,627	US 5,763,374
US 4,995,996	US 4,990,271	US 4,978,464	US 4,846,983
US 4,832,857	US 4,478,729	US 4,466,901	US 4,428,848
US 4,414,122	US 4,402,840	US 4,395,343	US 4,394,279
US 4,369,119	US 4,362,633	US 4,357, 149	US 4,324,672
US 4,285,822	US 4,283,295	US 4,272,387	US 4,265,773
US 4,263,152	US 4,261,843	US 4,259,195	US 4,259,194
US 4,248,720	US 4,202,781	US 4,201,683	US 4,192,757
US 4,178,258	US 4,164,473	US 4,098,705	US 3,733,345
EP 0 874 040 A1	EP 0 822 246 A3	EP 0 768 366 A1	WO 00/08120
WO 95/07963 A1	WO 95/07964 A1	WO 95/07965 A1	WO 95/07966 A1
WO 95/27022 A1	WO 96/19551 A1		

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the hydroxysubstituted dithiocarbamates as taught by Latyuk et al. and Belov et al. in the lubricating composition of Luciani et al. in order to provide the same utility, i.e., antiwear, antiscuff and anticorrosion properties. Further, it would have been obvious to include a molybdenum compound in order to improve the antioxidant, deposit control, anti-

Art Unit: 1764

wear and friction modifying properties of said lubricating composition as taught on page 2 of the specification.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3, 6-28, 37-40, 42, 47-60 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-61 of copending Application No. 10/062,161. Although the conflicting claims are not identical, they are not patentably distinct from each other because while not of the same scope, the claims of the instant application and the 10/062,161 application are directed to hydroxy-substituted dithiocarbamates and lubricating oil composition comprising said hydroxy-substituted dithiocarbamate with other conventional lubricant additives.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim 25 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form..

Art Unit: 1764

Claim 25 fails to further material limit the composition of claim 1

Applicant's arguments with respect to claims 1, 3, 6-28, 37-40, 42, 47-60 have been considered but are moot in view of the new ground(s) of rejection.

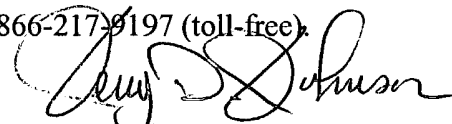
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry D. Johnson whose telephone number is (571) 272-1448.

The examiner can normally be reached on 6:00-3:30, M-F, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jerry D. Johnson
Primary Examiner
Art Unit 1764

jdj